

PATENT
IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Reissue Application of:)	
)	
Shelton <i>et al.</i>)	
)	Group Art Unit: To Be Assigned
Serial No.: To Be Assigned)	
)	Examiner: To Be Assigned
Filed: Herewith)	
)	Attorney Docket No.: 051919-1041
For: Method For Generating A Display)	
Utilizing Objects In An Object List)	
)	
U.S. Patent No.: 5,208,907)	

AMENDMENT
FOR REISSUE APPLICATION

Assistant Commissioner for Patents
Washington, DC 20231

Sir:

In regard to the above-referenced reissue application, the Applicant submits the following amendments and remarks to be respectively entered and considered prior to examination.

AUTHORIZATION TO DEBIT ACCOUNT

It is not believed that extensions of time or fees for net addition of claims are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required therefor (including fees for net addition of claims) are hereby authorized to be charged to Deposit Account No. 20-0778.

AMENDMENTS

Please amend the application as indicated hereafter.

In The Claims

The following claims are sought to be amended:

1. (Amended) In a computer system having input means for entering a plurality of objects to form an object list, data and commands into said system by a system user, an operator display module for displaying information to said user, a memory for storing said data and [instructions] commands, and processing means for performing processing operations in response to the entry of said data and said commands by said user, a method of generating a display on said operator display module comprising the steps in sequence of:

(a) entering a command into said system by said user to display a form;

(b) in response to said command, using said processing means to obtain said object list, corresponding to said form, from said memory;

(c) using said processing means, assigning a plurality of tiles to [each of] said objects in said object list, in the following manner: at least one of said tiles being assigned to a group of said objects, and at least a second of said tiles being assigned to an individual one of said objects; and

(d) using said processing means, displaying said tiles on said operator display module.

7. (Amended) In a computer system having input means for [entering] enabling entry of data, such as a plurality of objects to form an object list [, data] and commands into said system by a system user, an operator display module for displaying information to said user, a memory for storing said data and commands [instructions], and processing means for performing processing operations in response to the entry of said data and said commands by said user, a method of generating a display on said operator display module comprising the steps in sequence of:

(a) [entering] receiving a command [into] in said system [by] from said user to display a form;

(b) in response to said command, using said processing means to obtain said object list, corresponding to said form, from said memory;

(c) using said processing means, eliminating an object from said object list if said object is not a monitored object;

(d) using said processing means, obtaining a prioritization list, corresponding to said form, from said memory;

(e) using said processing means, prioritizing said object list according to said prioritization list;

(f) using said processing means, [assigning] associating a plurality of tiles [to each of] and said objects to be displayed in said object list, in the following manner: at least one of said tiles being [assigned to] associated with a group of said objects, and at least a second of said tiles being [assigned to] associated with an individual one of said objects and;

(g) using said processing means, displaying said tiles on said operator display module.

The following claims are sought to be added:

12. The method of claim 1 wherein step (d) further comprises the step of refraining from displaying on said operator display module at least one of said tiles that is without any of said objects.

13. The method of claim 1 further comprising the steps of:

(e) receiving a manually input object in a cell of a yet another one of said first tiles of the first form from said user;

(f) receiving a second command in said system from said user to display a second form having associated second tiles;

(g) obtaining a second object list, corresponding to said second form, from said memory;

(h) associating said second tiles and said manually input object in said second object list;
and

(i) displaying those of said second tiles on said operator display module that are associated with said manually input object received from said user, while refraining from displaying those of said second tiles on said operator display module that are not associated with said manually input object.

14. The method of claim 1 wherein said input means is or comprises a keyboard, mouse, trackball, joy stick, roller ball, or touch sensitive screen.

15. The method of claim 1 wherein said objects are text, numerals, or a combination thereof.

16. The method of claim 1 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

17. The method of claim 1 wherein at least one of said tiles is a window.

18. The method of claim 1 wherein said operator display module is a cathode ray tube or flat panel display.

19. The method of claim 1 wherein a shape associated with said form displayed on said operator display module is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

20. The method of claim 1 wherein each of said tiles has a definable corresponding size and shape.

21. The method of claim 1 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

22. The method of claim 1 further comprising the step of enabling a security measure by the steps of:

enabling said user to enter data in a first cell of said form; and
preventing said user from entering data in a second cell of said form.

23. The method of claim 1 further comprising the steps of:

receiving data in a first cell of said form; and
recording an identity of said user that entered said data.

24. The method of claim 1 further comprising the steps of:

receiving data in a first cell of said form; and
recording a time when said user entered said data.

25. The method of claim 1 further comprising the steps of:

receiving new data in a first cell of said form that changes original data in said first cell; and
retaining said original data along with said new data.

26. The method of claim 25 further comprising the steps of:

displaying said new data and said original data; and
visually distinguishing said new data and said original data with at least one of the
following: a marker, color difference, and flashing display.

27. The method of claim 1 further comprising the steps of:

receiving data in a first cell of said form;
performing a data integrity check upon said data to determine if said data is outside a range;
and
alerting said user of an error based upon said data integrity check.

28. The method of claim 1 further comprising the steps of:
receiving a command from said user to select a first cell; and
displaying a menu of possible actions that may be undertaken in said first cell.

29. The method of claim 28 wherein said possible actions comprise at least one of the
following: making an entry into said first cell, changing data in said first cell, and showing
details associated with said first cell.

30. In a computer system having input means for enabling entry of data, such as a
plurality of objects to form an object list, and commands into said system by a system user, an
operator display module for displaying information to said user, a memory for storing said data and
commands, and processing means for performing processing operations in response to the entry of
said data and said commands by said user, a method of generating a display on said operator display
module comprising the steps in sequence of:

(a) receiving a command in said system from said user to display a form, said form having
tiles, each of the tiles having at least one cell capable of facilitating entry of an object by the system
user;

(b) in response to said command, using said processing means to obtain said object list,
corresponding to said form, from said memory;

(c) using said processing means, associating tiles and said objects in said object list, in the
following manner: at least a first one of said tiles being associated with a group of said objects, and
at least a second one of said tiles being associated with an individual one of said objects;

(d) using said processing means, displaying said tiles on said operator display module that
contain objects and refraining from displaying on said operator display module at least one of said
tiles that is without any of said objects.

31. The method of claim 30 wherein said input means is or comprises a keyboard,
mouse, trackball, joy stick, roller ball, or touch sensitive screen.

32. The method of claim 30 wherein said objects correspond to text, numerals, or a combination thereof.

33. The method of claim 30 wherein at least one of said objects comprises a vital sign.

34. The method of claim 30 wherein at least one of said objects comprises lab information.

35. The method of claim 30 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

36. The method of claim 30 wherein at least one of said tiles is a window to be displayed.

37. The method of claim 30 wherein said operator display module is a cathode ray tube or flat panel display.

38. The method of claim 30 wherein a shape associated with said form displayed on said operator display module is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

39. The method of claim 30 wherein each of said tiles has a definable corresponding size and shape.

40. The method of claim 30 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

41. The method of claim 30 further comprising the steps of:
enabling said user to enter data in a first cell of said form; and
preventing said user from entering data in a second cell of said form.

42. The method of claim 30 further comprising the steps of:
receiving data in a first cell of said form; and
recording an identity of said user that entered said data.

43. The method of claim 30 further comprising the steps of:
receiving data in a first cell of said form; and
recording a time when said user entered said data.

44. The method of claim 30 further comprising the steps of:
receiving new data in a first cell of said form that changes original data in said first cell; and
retaining said original data along with said new data.

45. The method of claim 44 further comprising the steps of:
displaying said new data and said original data; and
visually distinguishing said new data and said original data with at least one of the
following: a marker, color difference, and flashing display.

46. The method of claim 30 further comprising the steps of:
receiving data in a first cell of said form;
performing a data integrity check upon said data to determine if said data is outside a range;
and
alerting said user of an error based upon said data integrity check.

47. The method of claim 30 further comprising the steps of:
receiving a command from said user to select a first cell; and
displaying a menu of possible actions that may be undertaken in connection with said first
cell.

48. The method of claim 47 wherein said possible actions comprise at least one of the
following: making an entry into said first cell, changing data in said first cell, and showing details
associated with said first cell.

49. In a computer system having input means for enabling entry of data, such as a
plurality of objects to form an object list, and commands into said system by a system user, an
operator display module for displaying information to said user, a memory for storing said data and
commands, and processing means for performing processing operations in response to the entry of
said data and said commands by said user, a method of generating a display on said operator display
module comprising the steps of:

(1) the steps in sequence of:

(a) receiving a command in said system from said user to display a first form, said
first form having first tiles, each of the first tiles having at least one cell capable of
facilitating entry of an object by the system user;

(b) in response to said command, using said processing means to obtain a first
object list, corresponding to said first form, from said memory;

(c) using said processing means, associating said first tiles and said objects in said
first object list, in at least the following manner: at least one of said first tiles being
associated with a group of said objects, and at least another one of said first tiles being
associated with an individual one of said objects;

(d) using said processing means, displaying said first tiles on said operator display
module that contain objects; and

(2) the further steps of:

(i) receiving a manually input object from said user in a cell of one of said displayed first tiles of the first form and a second command to display a second form, said manually input object being associated with said second form; and

(ii) using said processing means, displaying on said operator display module said second form with said manually input object and those tiles associated with said manually input object, while refraining from displaying on said operator display module any tiles that are not associated with said manually input object.

50. The method of claim 49 wherein said input means is or comprises a keyboard, mouse, trackball, joy stick, roller ball, or touch sensitive screen.

51. The method of claim 49 wherein said objects correspond to text, numerals, or a combination thereof.

52. The method of claim 49 wherein at least one of said objects comprises a vital sign.

53. The method of claim 49 wherein at least one of said objects comprises lab information.

55. The method of claim 49 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

55. The method of claim 49 wherein at least one of said tiles is a window to be displayed.

56. The method of claim 49 wherein said operator display module is or comprises a cathode ray tube or flat panel display.

57. The method of claim 49 wherein a shape associated with said form displayed on said operator display module is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

58. The method of claim 49 wherein each of said tiles has a definable corresponding size and shape.

59. The method of claim 49 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

60. The method of claim 49 further comprising the steps of:
enabling said user to enter data in a first cell of said form; and
preventing said user from entering data in a second cell of said form.

61. The method of claim 49 further comprising the steps of:
receiving data in a first cell of said form; and
recording an identity of said user that entered said data.

62. The method of claim 49 further comprising the steps of:
receiving data in a first cell of said form; and
recording a time when said user entered said data.

63. The method of claim 49 further comprising the steps of:
receiving new data in a first cell of said form that changes original data in said first cell; and
retaining said original data along with said new data.

64. The method of claim 63 further comprising the steps of:
displaying said new data and said original data; and
visually distinguishing said new data and said original data with at least one of the
following: a marker, color difference, and flashing display.

65. The method of claim 49 further comprising the steps of:
receiving data in a first cell of said form;
performing a data integrity check upon said data to determine if said data is outside a range;
and
alerting said user of an error based upon said data integrity check.

66. The method of claim 49 further comprising the steps of:
receiving a command from said user to select a first cell; and
displaying a menu of possible actions that may be undertaken in connection with said first
cell.

67. The method of claim 66 wherein said possible actions comprise at least one of the
following: making an entry into said first cell, changing data in said first cell, and showing details
associated with said first cell.

68. In a computer system having (a) input means for enabling entry of data and
commands into said system by a system user, said data including a plurality of objects to form an
object list, (b) an operator display module for displaying information to said user, (c) a memory for
storing said data and commands, and (d) processing means for performing processing operations in
response to said entry of said data and said commands by said user, a method of generating a
display on said operator display module, comprising the steps in sequence of:

- (1) receiving a command in said system from said user to display a form;
- (2) in response to said command, using said processing means to obtain said object list,
corresponding to said form, from said memory;

(3) using the processing means, associating said objects in said object list and tiles in the following manner:

(i) a group of objects comprising some but not all of said objects in said object list is associated with a first tile; and

(ii) an object in said object list that is not a part of said group of objects is associated with a second tile; and

(4) using the processing means, displaying said tiles on said operator display module.

69. The method of claim 68, wherein the step (3) of associating further comprises the step of (iii) associating at least one other object, in addition to said object, in said object list that is not a part of the said group with said second tile.

70. The method of claim 68, wherein the step (3) of displaying further comprises the step of refraining from displaying on said operator display module at least one of said tiles that is without any of said objects.

71. The method of claim 68 wherein said input means is or comprises a keyboard, mouse, trackball, joy stick, roller ball, or touch sensitive screen.

72. The method of claim 68 wherein said objects correspond to text, numerals, or a combination thereof.

73. The method of claim 68 wherein at least one of said objects comprises a vital sign.

74. The method of claim 68 wherein at least one of said objects comprises lab information.

75. The method of claim 68 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

76. The method of claim 68 wherein at least one of said tiles is a window to be displayed.

77. The method of claim 68 wherein said operator display module is a cathode ray tube or flat panel display.

78. The method of claim 68 wherein a shape associated with said form displayed on said operator display module is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

79. The method of claim 68 wherein each of said tiles has a definable corresponding size and shape.

80. The method of claim 68 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

71. The method of claim 68 further comprising the steps of:
enabling said user to enter data in a first cell of said form; and
preventing said user from entering data in a second cell of said form

82. The method of claim 68 further comprising the steps of:
receiving data in a first cell of said form; and
recording an identity of said user that entered said data.

83. The method of claim 68 further comprising the steps of:

receiving data in a first cell of said form; and

recording a time when said user entered said data.

84. The method of claim 68 further comprising the steps of:

receiving new data in a first cell of said form that changes original data in said first cell; and

retaining said original data along with said new data.

85. The method of claim 84 further comprising the steps of:

displaying said new data and said original data; and

visually distinguishing said new data and said original data with at least one of the following: a marker, color difference, and flashing display.

86. The method of claim 68 further comprising the steps of:

receiving data in a first cell of said form;

performing a data integrity check upon said data to determine if said data is outside a range;

and

alerting said user of an error based upon said data integrity check.

87. The method of claim 68 further comprising the steps of:

receiving a command from said user to select a first cell; and

displaying a menu of possible actions that may be undertaken in connection with said first cell.

88. The method of claim 87 wherein said possible actions comprise at least one of the following: making an entry into said first cell, changing data in said first cell, and showing details associated with said first cell.

89. A computer system, comprising:

(a) input means for enabling entry of data and commands into said system by a system user, said data including a plurality of objects forming an object list;

(b) display means for displaying information to said user;

(c) memory means for storing said data and said commands;

(d) processing means for performing processing operations in response to the entry of said data and said commands by said user, said processing means for generating a display on said operator display module;

(e) means, stored in said memory and to be executed by said processing means, for receiving a command from said user to display a form;

(f) means, stored in said memory and to be executed by said processing means, for, in response to said command, obtaining said object list, corresponding to said form, from said memory;

(g) means, stored in said memory and to be executed by said processing means, for associating tiles and said objects in said object list, in at least the following manner:

(1) for associating at least a first one of said tiles to a group of said objects; and

(2) for associating at least a second one of said tiles to an individual one of said objects; and

(h) means, stored in said memory and to be executed by said processing means, for displaying said first and second tiles on said operator display module.

90. The system of claim 89 wherein said means (h) further comprises:

(i) means for moving a draw point to a home position of said operator display module;

(ii) means for drawing a tile of at least one object if there is an object to be drawn;

(iii) means for moving said draw point to a next position of said operator display module;

and

(iv) means for repeating steps (ii) through (iii) until said tiles for all of said objects in said object list have been drawn or until a display area of said operator display module has been filled.

91. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for eliminating an object from said object list if said object is not currently monitored by said system;

(ii) means, stored in said memory and to be executed by said processing means, for objecting a prioritization list from said memory; and

(iii) means, stored in said memory and to be executed by said processing means, for arranging said objects according to said prioritization list.

92. The system of claim 89 wherein at least one tile comprises a text means and a data means.

93. The system of claim 89 wherein at least one of said tiles comprises a definition means comprising:

means for defining a physical size and shape of said at least one tile;

means for defining an information display rule;

means for defining an access table for identifying system users who are granted access to said at least one tile;

means for defining a tile name; and

a storage means for retaining the respective times of entries and identification of a system user making said entries of objects into one or more regions of said at least one tile.

94. The system of claim 89 wherein one of said tiles has associated with it a plurality of regions, at least one of said regions comprising a plurality of objects, and further comprising:

(i) means, stored in said memory and to be executed by said processing means, for receiving a command to display the contents of said at least one region; and

(j) means, stored in said memory and to be executed by said processing means, for displaying a pop-up menu corresponding to said at least one region of said one tile on said operator display module.

95. The system of claim 89 further comprising means, stored in said memory and to be executed by said processing means, for refraining from displaying on said operator display module at least one of said tiles that is without any of said objects.

96. The system of claim 89 wherein said input means is or comprises a keyboard, mouse, trackball, joy stick, roller ball, or touch sensitive screen.

97. The system of claim 89 wherein said objects are text, numerals, or a combination thereof.

98. The method of claim 89 wherein at least one of said objects comprises a vital sign.

99. The method of claim 89 wherein at least one of said objects comprises lab information.

100. The system of claim 89 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

101. The system of claim 89 wherein at least one of said tiles is a window.

102. The system of claim 89 wherein said operator display means is or comprises a cathode ray tube or flat panel display.

103. The system of claim 89 wherein a shape associated with said form displayed on said operator display module is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

104. The system of claim 89 wherein each of said tiles has a definable corresponding size and shape.

105. The system of claim 89 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

106. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for enabling said user to enter data in a first cell of said form; and

(j) means, stored in said memory and to be executed by said processing means, for preventing said user from entering data in a second cell of said form

107. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for receiving data in a first cell of said form; and

(j) means, stored in said memory and to be executed by said processing means, for recording an identity of said user that entered said data.

108. The system of claim 89 further comprising the steps of:

(i) means, stored in said memory and to be executed by said processing means, for receiving data in a first cell of said form; and

(j) means, stored in said memory and to be executed by said processing means, for recording a time when said user entered said data.

109. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for receiving new data in a first cell of said form that changes original data in said first cell; and

(j) means, stored in said memory and to be executed by said processing means, for retaining said original data along with said new data.

110. The system of claim 109 further comprising:

(k) means, stored in said memory and to be executed by said processing means, for displaying said new data and said original data; and

(l) means, stored in said memory and to be executed by said processing means, for visually distinguishing said new data and said original data with at least one of the following: a marker, color difference, and flashing display.

111. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for receiving data in a first cell of said form;

(j) means, stored in said memory and to be executed by said processing means, for performing a data integrity check upon said data to determine if said data is outside a range; and

(k) means, stored in said memory and to be executed by said processing means, for alerting said user of an error based upon said data integrity check.

112. The system of claim 89 further comprising:

(i) means, stored in said memory and to be executed by said processing means, for receiving a command from said user to select a first cell; and

(j) means, stored in said memory and to be executed by said processing means, for displaying a menu of possible actions that may be undertaken in said first cell.

113. The system of claim 112 wherein said possible actions comprise at least one of the following: making an entry into said first cell, changing data in said first cell, and showing details associated with said first cell.

114. A computer system, comprising:

(a) an input device designed to enable entry of data and commands into said system by a system user, said data including a plurality of objects forming an object list;

(b) a display designed to display information to said user;

(c) a memory designed to store said data and said commands;

(d) a processor designed to perform processing operations in response to entry of said data and said commands by said user, said processor programmed to perform the steps in sequence of:

(1) receiving a command from said user to display a form, in response to said command, to obtain said object list, corresponding to said form, from said memory;

(2) obtaining said object list, corresponding to said form, from said memory;

(3) associating tiles and said objects in said object list, in at least the following manner: associating at least a first one of said tiles to a group of said objects; and associating at least a second one of said tiles to an individual one of said objects; and

(4) displaying said first and second tiles on said operator display module.

115. The computer system of claim 114 wherein said processor is programmed to perform the step of refraining from displaying on said display module at least one of said tiles that is without any of said objects.

116. The computer system of claim 114 wherein said input device is or comprises a keyboard, mouse, trackball, joy stick, roller ball, or touch sensitive screen.

117. The computer system of claim 114 wherein said objects correspond to text, numerals, or a combination thereof.

118. The computer system of claim 114 wherein at least one of said objects comprises at least one of the following: a heart rate, a blood pressure, a temperature, and a respiration rate.

119. The computer system of claim 114 wherein at least one of said tiles is a window to be displayed.

120. The computer system of claim 114 wherein said display is a cathode ray tube or flat panel display.

121. The computer system of claim 114 wherein a shape associated with said form displayed on said display is based upon said displayed tiles as well as those of said tiles that are not displayed for lack of any of said objects.

122. The computer system of claim 114 wherein each of said tiles has a definable corresponding size and shape.

123. The computer system of claim 114 wherein each of said tiles has an identifier with which it can be referenced, said identifier being one of the following: a name and a number.

124. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

enabling said user to enter data in a first cell of said form; and
preventing said user from entering data in a second cell of said form.

125. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

receiving data in a first cell of said form; and
recording an identity of said user that entered said data.

126. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

receiving data in a first cell of said form; and
recording a time when said user entered said data.

127. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

receiving new data in a first cell of said form that changes original data in said first cell; and
retaining said original data along with said new data.

128. The computer system of claim 127, wherein said processor is programmed to perform the steps of:

displaying said new data and said original data; and
visually distinguishing said new data and said original data with at least one of the
following: a marker, color difference, and flashing display.

129. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

receiving data in a first cell of said form;
performing a data integrity check upon said data to determine if said data is outside a range;
and
alerting said user of an error based upon said data integrity check.

130. The computer system of claim 114 wherein said processor is programmed to perform the steps of:

receiving a command from said user to select a first cell; and
displaying a menu of possible actions that may be undertaken in connection with said first
cell.

131. The computer system of claim 130 wherein said possible actions comprise at least one of the following: making an entry into said first cell, changing data in said first cell, and showing details associated with said first cell.

REMARKS

Upon entry of this Amendment, claims 1-130 are pending. Specifically, claims 1 and 7 are sought to be amended, and claims 12-130 are sought to be added. It is believed that the foregoing amendments and additions add no new matter to the present application.

Support in the Specification for Amended Claims

In accordance with MPEP Section 1453, below is an explanation of support for each amended or added claim. The explanation provides the location in the specification for at least one supporting statement in the specification for each amended or added claim. Where appropriate, reference to drawings are also provided. Furthermore, support for each amended or added claim may also be found elsewhere throughout the specification and the drawings, to which the Examiner is respectfully referred to. Therefore, Applicant believes that the claims, as amended, do not add new matter to the application.

Amended Claim 1: A statement(s) supporting that amended claim 1 is found in the specification of the issued patent can be found in at least the following place(s):

Original Unamended Claim 1 at col. 13, Lines 24-45

Amended Claim 7: A statement(s) supporting that amended claim 7 is found in the specification of the issued patent can be found in at least the following place(s):

Original Unamended Claim 7 at Col. 14, Line 47 to Col. 15, Line 10

Claim 12: A statement(s) supporting that claim 12 is found in the specification of the issued patent

can be found in at least the following place(s):

Abstract, lines 6-7
Col. 2, Lines 31-33
Col. 7, Line 53 to Col. 8, Line 11

Claim 13: A statement(s) supporting that claim 13 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 13, Lines 24-45
Abstract, lines 6-7
Col. 2, Lines 31-33
Col. 7, lines 53 to Col. 8, line 11.
Fig. 10

Claim 14: A statement(s) supporting that claim 14 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 1, Lines 59-61
Col. 3, Line 38
Col. 3, Lines 50-52
Col. 4, line 48

Claim 15: A statement(s) supporting that claim 15 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 3, lines 21-23

Claim 16: A statement(s) supporting that claim 16 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 35-59

Claim 17: A statement(s) supporting that claim 17 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 25-27

Claim 18: A statement(s) supporting that claim 18 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 45-49

Claim 19: A statement(s) supporting that claim 19 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33

Claim 20: A statement(s) supporting that claim 20 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23

Claim 21: A statement(s) supporting that claim 21 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23

Claim 22: A statement(s) supporting that claim 22 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-23

Claim 23: A statement(s) supporting that claim 23 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 24: A statement(s) supporting that claim 24 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 25: A statement(s) supporting that claim 25 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 39-46

Claim 26: A statement(s) supporting that claim 26 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46

Claim 27: A statement(s) supporting that claim 27 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58

Claim 28: A statement(s) supporting that claim 28 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 1-8

Claim 29: A statement(s) supporting that claim 29 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, lines 9-15

Claim 30: A statement(s) supporting that claim 30 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 13, Lines 24-45

Abstract, lines 6-7

Col. 2, Lines 31-33

Col. 7, lines 53 to Col. 8, line 11.

Fig. 10

Claim 31: A statement(s) supporting that claim 31 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 1, Lines 59-61

Col. 3, Line 38

Col. 3, Lines 50-52

Col. 4, line 48

Claim 32: A statement(s) supporting that claim 32 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 21-23

Claim 33: A statement(s) supporting that claim 33 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 34: A statement(s) supporting that claim 34 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 35: A statement(s) supporting that claim 35 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 35-59

Claim 36: A statement(s) supporting that claim 36 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, lines 25-27

Claim 37: A statement(s) supporting that claim 37 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, lines 45-49

Claim 38: A statement(s) supporting that claim 38 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33

Claim 39: A statement(s) supporting that claim 39 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23

Claim 40: A statement(s) supporting that claim 40 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23

Claim 41: A statement(s) supporting that claim 41 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-30

Claim 42: A statement(s) supporting that claim 42 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 43: A statement(s) supporting that claim 43 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 44: A statement(s) supporting that claim 44 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 39-46

Claim 45: A statement(s) supporting that claim 45 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46

Claim 46: A statement(s) supporting that claim 46 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58

Claim 47: A statement(s) supporting that claim 47 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 1-8

Claim 48: A statement(s) supporting that claim 48 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 9-15

Claim 49: A statement(s) supporting that claim 49 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 13, Lines 24-45
Abstract, Lines 6-7
Col. 2, Lines 31-33
Col. 7, Line 53 to Col. 8, Line 11
Fig. 10

Claim 50: A statement(s) supporting that claim 50 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 1, Lines 59-61

Col. 3, Line 38

Col. 3, Lines 50-52

Col. 4, Line 48

Claim 51: A statement(s) supporting that claim 51 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 3, Lines 21-23

Claim 52: A statement(s) supporting that claim 52 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 53: A statement(s) supporting that claim 52 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 54: A statement(s) supporting that claim 54 is found in the specification of the issued patent

can be found in at least the following place(s):

Col. 5, Lines 35-59

Claim 55: A statement(s) supporting that claim 55 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 25-27

Claim 56: A statement(s) supporting that claim 56 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 45-49

Claim 57: A statement(s) supporting that claim 57 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33

Claim 58: A statement(s) supporting that claim 58 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23

Claim 59: A statement(s) supporting that claim 59 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23

Claim 60: A statement(s) supporting that claim 60 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-30

Claim 61: A statement(s) supporting that claim 61 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 62: A statement(s) supporting that claim 62 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 63: A statement(s) supporting that claim 63 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 39-46

Claim 64: A statement(s) supporting that claim 64 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46

Claim 65: A statement(s) supporting that claim 65 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58

Claim 66: A statement(s) supporting that claim 66 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 1-8

Claim 67: A statement(s) supporting that claim 67 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 7, Lines 9-15

Claim 68: A statement(s) supporting that claim 68 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 1 on Col. 13, Lines 24-45
Also see Col. 5, Lines 44-68

Claim 69: A statement(s) supporting that claim 69 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 1 on Col. 13, Lines 24-45
Col. 5, Lines 44-68
Fig. 9

Claim 70: A statement(s) supporting that claim 70 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 13, Lines 24-45
Abstract, Lines 6-7
Col. 2, Lines 31-33
Col. 7, line 53 to Col. 8, Line 11
Fig. 10

Claim 71: A statement(s) supporting that claim 71 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 1, Lines 59-61
Col. 3, Line 38
Col. 3, Lines 50-52
Col. 4, Line 48

Claim 72: A statement(s) supporting that claim 72 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 21-23

Claim 73: A statement(s) supporting that claim 73 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 74: A statement(s) supporting that claim 74 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 75: A statement(s) supporting that claim 75 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 35-59

Claim 76: A statement(s) supporting that claim 76 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 25-27

Claim 77: A statement(s) supporting that claim 77 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 45-49

Claim 78: A statement(s) supporting that claim 78 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33

Claim 79: A statement(s) supporting that claim 79 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23

Claim 80: A statement(s) supporting that claim 80 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23

Claim 81: A statement(s) supporting that claim 81 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-30

Claim 82: A statement(s) supporting that claim 82 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 83: A statement(s) supporting that claim 83 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36

Claim 84: A statement(s) supporting that claim 84 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 39-46

Claim 85: A statement(s) supporting that claim 85 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46

Claim 86: A statement(s) supporting that claim 86 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58

Claim 87: A statement(s) supporting that claim 87 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 1-8

Claim 88: A statement(s) supporting that claim 88 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 9-15

Claim 89: A statement(s) supporting that claim 89 is found in the specification of the issued patent can be found in at least the following place(s):

Original claim 1 at Col. 13, Lines 24-45
Figs. 1 and 7

Claim 90: A statement(s) supporting that claim 90 is found in the specification of the issued patent
can be found in at least the following place(s):

Original claim 2 at Col. 13, Lines 46-58
Fig. 1

Claim 91: A statement(s) supporting that claim 91 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 3 at Col. 13, Lines 59-67
Fig. 1

Claim 92: A statement(s) supporting that claim 92 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 4 at Col. 14, Lines 23-24
Fig. 1

Claim 93: A statement(s) supporting that claim 93 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 5 at Col. 14, Lines 25-36
Fig. 1

Claim 94: A statement(s) supporting that claim 94 is found in the specification of the issued patent
can be found in at least the following place(s):

Original Claim 6 at Col. 14, Lines 37-46
Fig. 1

Claim 95: A statement(s) supporting that claim 95 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 13, Lines 24-45
Abstract, Lines 6-7
Col. 2, Lines 31-33
Col. 7, line 53 to Col. 8, Line 11
Figs. 1 and 10

Claim 96: A statement(s) supporting that claim 96 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 1, Lines 59-61
Col. 3, Line 38
Col. 3, Lines 50-52
Col. 4, Line 48
Fig. 1

Claim 97: A statement(s) supporting that claim 97 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 3, Lines 21-23
Fig. 1

Claim 98: A statement(s) supporting that claim 98 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 99: A statement(s) supporting that claim 99 is found in the specification of the issued patent
can be found in at least the following place(s):

Col. 5, Lines 29-43

Claim 100: A statement(s) supporting that claim 100 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 35-59
Fig. 1

Claim 101: A statement(s) supporting that claim 101 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 25-27
Fig. 1

Claim 102: A statement(s) supporting that claim 102 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 45-49
Fig. 1

Claim 103: A statement(s) supporting that claim 103 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33
Fig. 1

Claim 104: A statement(s) supporting that claim 104 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23
Fig. 1

Claim 105: A statement(s) supporting that claim 105 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23
Fig. 1

Claim 106: A statement(s) supporting that claim 106 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-30
Fig. 1

Claim 107: A statement(s) supporting that claim 107 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36
Fig. 1

Claim 108: A statement(s) supporting that claim 108 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36
Fig. 1

Claim 109: A statement(s) supporting that claim 109 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 39-46
Fig. 1

Claim 110: A statement(s) supporting that claim 110 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46
Fig. 1

Claim 111: A statement(s) supporting that claim 111 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58
Fig. 1

Claim 112: A statement(s) supporting that claim 112 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 1-8
Fig. 1

Claim 113: A statement(s) supporting that claim 113 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, Lines 9-15
Fig. 1

Claim 114: A statement(s) supporting that claim 114 is found in the specification of the issued patent can be found in at least the following place(s):

Original claim 1 at Col. 13, Lines 24-45
Figs. 1 and 7

Claim 115: A statement(s) supporting that claim 115 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 13, Lines 24-45
Abstract, Lines 6-7
Col. 2, Lines 31-33
Col. 7, line 53 to Col. 8, Line 11
Figs. 1 and 10

Claim 116: A statement(s) supporting that claim 116 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 1, Lines 59-61
Col. 3, Line 38
Col. 3, Lines 50-52
Col. 4, Line 48
Fig. 1

Claim 117: A statement(s) supporting that claim 117 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 21-23
Fig. 1

Claim 118: A statement(s) supporting that claim 118 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 35-59
Fig. 1

Claim 119: A statement(s) supporting that claim 119 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 25-27
Fig. 1

Claim 120: A statement(s) supporting that claim 120 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 3, Lines 45-49
Fig. 1

Claim 121: A statement(s) supporting that claim 121 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 5, Lines 29-33
Fig. 1

Claim 122: A statement(s) supporting that claim 122 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 10-23
Fig. 1

Claim 123: A statement(s) supporting that claim 123 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 20-23
Fig. 1

Claim 124: A statement(s) supporting that claim 124 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 24-30
Fig. 1

Claim 125: A statement(s) supporting that claim 125 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36
Fig. 1

Claim 126: A statement(s) supporting that claim 126 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 30-36
Fig. 1

Claim 127: A statement(s) supporting that claim 127 is found in the specification of the issued patent can be found in at least the following place(s):

Col 6, Lines 39-46
Fig. 1

Claim 128: A statement(s) supporting that claim 128 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 43-46
Fig. 1

Claim 129: A statement(s) supporting that claim 129 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 6, Lines 49-58
Fig. 1

Claim 130: A statement(s) supporting that claim 130 is found in the specification of the issued patent can be found in at least the following place(s):

Col. 7, lines 1-8
Fig. 1

Claim 131: A statement(s) supporting that claim 131 is found in the specification of the issued patent can be found in at least the following place(s):

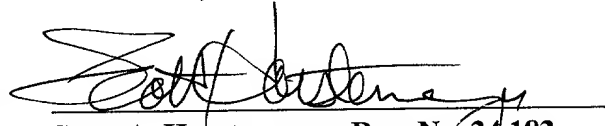
Col. 7, Lines 9-15
Fig. 1

Favorable action in regard to the application is earnestly solicited.

Respectfully submitted ,

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